0039

PLATEAU
MINING
CORPORATION

Willow Creek Mine
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Helper, Utah 84526
(435) 472-0475
Fax: (435) 472-4780
An affiliate of RAG

July 19, 2001

Mr. Daron R. Haddock
Utah Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
P.O. Box 145801
Salt Lake City, Utah 84114-5801

Re: **Water Monitoring Changes, Response to Technical Analysis, Plateau Mining Corporation, Willow Creek Mine, C[redacted]AM00L-1, Carbon County, Utah**

Dear Mr. Haddock:

Plateau Mining Corporation (PMC) is submitting its response to the Division's June 2001 Technical Analysis regarding PMC's proposed water monitoring requirements. In reviewing several of the deficiencies, it appeared to PMC that these deficiencies arose through a misunderstanding by the Division due to some miscommunication by PMC.

PMC will attempt to clarify its reason for the proposed changes and why it believes that proposed changes are in compliance with Utah's R645 Coal Rules. PMC does not believe that a lot of verbiage needs to be added to the Plan for justification of the proposed changes, mainly because the supporting information is presented in the existing Plan and CHIA.

R645-301-731, *1) Modify Tables 3.7-1 and 4.7-1 to reflect removal of monitoring points B131 and B241.*
Tables 3.7-1 and 4.7-1 have now been revised to reflect the change, however, PMC would rather leave the sites on the Tables denoting when removed from further monitoring for historical purposes.

R645-301-731, *2) Retain laboratory analysis of pH and EC of water samples, or provide adequate justification for their removal.* PMC believes that a permit discrepancy exists whereby the text on page 4.7-12 states "... water quality parameters include field measurements for pH, specific conductance, and temperature and laboratory measurements for general water characteristics such as TDS, nutrients, major ions, and trace metals." Table 4.7-2 shows pH and EC being performed twice, once in the field and again in the lab. PMC believes that measuring for pH and EC twice is redundant, unnecessary and costly.

R645-301-731.211 and -731.222.1 state that monitoring will include pH and EC. It does not say that pH and EC will be done in the field and in the lab. Furthermore, the inorganic parameter holding time for pH is immediate. Moreover, the pH of the water may be subject to change during the interval between sampling and determination by reactions such as oxidation or hydrolysis that take place in

the bottle. The loss of gases, biological activity, and the absorption of laboratory fumes are all potential sources of change in pH.

PMC wishes only to perform pH and EC in the field, with its calibrated pH and EC meter.

R645-301-731, *3) Retain dissolved oxygen monitoring for sites B25 and B26.* The reason PMC proposed discontinuing the monitoring for dissolved oxygen on sites B25 and B26 is because the stream is ephemeral, lacks fish habitat and access, and was never monitored for dissolved oxygen under the Castle Gate Permit monitoring program.

Regarding fish habitat and accessibility, it would be very difficult for a fish to swim under Highway 6 and jump about 12 feet up the concrete fall where ephemeral surface flows from Crandall Canyon discharge into the Highway culvert and then into the Price River.

R645-301-731, *4) Provide adequate justification for changing Table 4.7-2 Dissolved Oxygen requirements, or do not make the changes.* PMC prides itself with its environmental stewardship and compliance with the regulations, but to monitor for dissolved oxygen on surface waters where mining is proposed, or adjacent to, some 2000+ feet below the surface does not seem logical nor is it required by R645-301-731.222.1.

Dissolved oxygen monitoring at mine sites is typically conducted at mine water discharge point source locations as determined by Utah's Division of Water Quality under its UPDES permit program. The Division of Water Quality requires the permittee to conduct an array of water analyses to determine what constituents are present in the water to be discharged in order to identify any and all potential toxicants present in the water. From these analyses, the Division generates a "Statement of Basis" establishing the basis for effluent limits.

Should dissolved oxygen levels be an effluent limitation, then prior to any discharging the operator must increase the dissolved oxygen levels by utilizing whatever aeration method meets its objective. One common approach to increasing dissolved oxygen levels is to replicate mother nature; convey the water across a long rough channel bottom with occasional drop points (waterfalls) to expose more of the water surface to oxygen.

Regarding fish habitat and these surface waters' ability to facilitate any fish population, PMC met with Mr. Louis Berg (UDWR) on July 2, 2001, to visually observe the Mathis stream channel profile and features, and to conduct spot electro-shocking of pools where fish are likely to be found. His electro-shocking of numerous pools and various reaches within the stream showed no presence of fish. A letter stating his findings and recommendations is forthcoming and not available at this time for inclusion into the plan. It will, however, be submitted to the Division under separate cover when received.

PMC is only requesting the omission of dissolved oxygen monitoring on those surface waters where

its mining activities potential to affect dissolved oxygen levels is very remote to impossible, and where fish access to a surface water from Willow Creek and Price River is not possible due to natural impediments where ingress and egress is precluded. The omission of dissolved oxygen from monitoring sites B263, B353, and B221 are being requested in addition to B25 and B26.

PMC will continue with the dissolved oxygen monitoring at sites B3N, B5, B6, B151, and B211. Site B211, located at the mouth of Mathis Canyon, is being retained as agreed to with Mr. Louis Berg.

R645-301-731, *6) Retain all existing first quarter water monitoring.* Table 4.7-3 has been revised to reflect quarterly monitoring. The monitoring program proposed is compliant with the regulations and more operator friendly, whereby monitoring is performed during a designated month of the quarter and not some hit and miss approach performed during the previous monitoring program.

The proposed program achieves the same objective as the past program, which is to determine the impacts of the operation upon the hydrologic balance, and where high and low flows are analyzed for field and laboratory parameters, with a midseason flow monitored for only field parameters. PMC believes that the objective of any quality monitoring program is to understand the flow and chemical characteristics of the water source and to provide a measure by which impacts to the hydrologic balance can be identified. It does not believe, that the chemical analysis of the water needs to be analyzed each quarter of the year, but only during the high and low flow periods of the year.

As discussed in the CHIA, chemically the surface water in the Price River is a calcium-bicarbonate type, but surface water in Willow Creek is more of a mixed type with calcium or magnesium and bicarbonate as dominant ions. Waters from ephemeral and intermittent tributaries also are calcium-bicarbonate chemical type. Surface water quality varies temporally and appears to be flow dependent.

Seeps and springs are typically a calcium-bicarbonate type; however, some have a calcium-sulfate or sodium-bicarbonate composition. Ground water quality is dependent on the source of recharge, flow path, nature of the strata through which the water flows, and discharge mechanism.

Hydrologic resource information is provided in Section 3.7 of the Willow Creek Plan and in the CHIA document.

Therefore, as depicted on the Table 4.7-3, monitoring of surface and ground water by PMC is being proposed for further consideration by the Division. If the Division does not concur with PMC, then please provide an alternative schedule with justification for consideration by PMC.

R645-301-731, 7) *Number all pages.* Typically PMC does not place page numbers on its tables, figures, exhibits, and the like. By doing this, it makes paginating the Plan less onerous. The location of tables, figures, and etc are provided in the Table of Contents.

The main reason for PMC requesting a water monitoring change is to establish a new 5-year water monitoring schedule; one that is compliant with the regulations and provides for meaningful data accumulation. The current Willow Creek monitoring plan requires sites B5 and B6 to be monitored nine times per year, but these same sites were required to be monitored only four times per year, for about 13 years, under the Castle Gate Mine Permit. This is just one example of how anomalous the existing Willow Creek water monitoring plan is.

If the Division has any questions or needs additional information, please do not hesitate to contact me at (435) 472-4741.

Sincerely,

Johnny Pappas
Sr. Environmental Engineer

Enclosures

File: Willow Creek Mine-Water Monitoring
Chrono: JP010703.ltr

Form DOGM - C1 (Last Revised February 10, 2000)

APPLICATION FOR PERMIT PROCESSING

Permit Change X	New Permit ☐	Renewal ☐	Transfer ☐	Exploration ☐	Bond Release ☐	Permit Number: C/007/038
Title of Proposal: Response to Technical Analysis Associated with Water Monitoring Changes, Willow Creek Mine, C/007/038-AM00L-1						Mine: Willow Creek Permittee: Plateau Mining Corporation

Description, include reason for application and timing required to implement:

Instructions: *If you answer yes to any of the first 8 questions (gray), this may be a Significant Revision and require Public Notice. Any questions, please call a Permit Supervisor.*

☐ Yes	X No	1. Change in the size of the Permit Area? _____ acres Disturbed Area? _____ acres ☐ increase ☐ decrease.
☐ Yes	X No	2. Is the application submitted as a result of a Division Order? DO #
☐ Yes	X No	3. Does application include operations outside a previously identified Cumulative Hydrologic Impact Area?
☐ Yes	X No	4. Does application include operations in hydrologic basins other than as currently approved?
☐ Yes	X No	5. Does application result from cancellation, reduction or increase of insurance or reclamation bond?
☐ Yes	X No	6. Does the application require or include public notice/publication?
☐ Yes	X No	7. Does the application require or include ownership, control, right-of-entry, or compliance information?
☐ Yes	X No	8. Is proposed activity within 100 feet of a public road or cemetery or 300 feet of an occupied dwelling?
☐ Yes	X No	9. Is the application submitted as a result of a Violation? NOV #
☐ Yes	X No	10. Is the application submitted as a result of other laws or regulations or policies? Explain:
☐ Yes	X No	11. Does the application affect the surface landowner or change the post mining land use?
☐ Yes	X No	12. Does the application require or include underground design or mine sequence and timing? (Modification of R2P2?)
☐ Yes	X No	13. Does the application require or include collection and reporting of any baseline information?
☐ Yes	X No	14. Could the application have any effect on wildlife or vegetation outside the current disturbed area?
☐ Yes	X No	15. Does application require or include soil removal, storage or placement?
☐ Yes	X No	16. Does the application require or include vegetation monitoring, removal or revegetation activities?
☐ Yes	X No	17. Does the application require or include construction, modification, or removal of surface facilities?
X Yes	☐ No	18. Does the application require or include water monitoring, sediment or drainage control measures?
☐ Yes	X No	19. Does the application require or include certified designs, maps, or calculations?
☐ Yes	X No	20. Does the application require or include subsidence control or monitoring?
☐ Yes	X No	21. Have reclamation costs for bonding been provided for?
☐ Yes	X No	22. Does application involve a perennial stream, a stream buffer zone or discharges to a stream?
☐ Yes	X No	23. Does the application affect permits issued by other agencies or permits issued to other entities?

Attach are 2 complete copies of the application for the Salt Lake Office and 1 copy is being delivered to the Price Field Office..

I hereby certify that I am a responsible official of the applicant and that the information contained in this application is true and correct to the best of my information and belief in all respects with the laws of Utah in reference to commitments, undertakings, and obligations, herein.

W. John Boyle 7/23/01
Signed Name - Position - Date

Subscribed and sworn to before me this 23 day of July, 20 01.

Kimberly Coleman
Notary Public

My Commission Expires: February 24, 2005
Attest: STATE OF Utah
COUNTY OF Carbon

KIMBERLY COLEMAN
NOTARY PUBLIC • STATE of UTAH
141 SOUTH 500 EAST
PRICE, UT 84501
COMM. EXP. 2-24-2005

Received by Oil, Gas & Mining
JUL 26 2001
ASSIGNED TRACKING NUMBER

Application for Permit Change
Detailed Schedule of Changes to the Permit

Title of Proposal: Response to Technical Analysis Associated with Water Monitoring Changes, Willow Creek Mine, C/007/038-AM00L-1	Permit Number: C/007/038 Mine: Willow Creek Permittee: Plateau Mining Corporation

Provide a detailed listing of all changes to the mining and reclamation plan which will be required as a result of this proposed permit change. Individually list all maps and drawings which are to be added, replaced, or removed from the plan. Include changes of the table of contents, section of the plan, pages, or other information as needed to specifically locate, identify and revise the exiting mining and reclamation plan. **Include page, section and drawing numbers as part of the description.**

			DESCRIPTION OF MAP, TEXT, OR MATERIALS TO BE CHANGED
☐ ADD	X REPLACE	☐ REMOVE	Section 4.7, Pages 4.7-12, and 4.7-15*
☐ ADD	X REPLACE	☐ REMOVE	Section 4.7, Tables 4.7-1, 4.7-2 and 4.7-3
☐ ADD	☐ REPLACE	☐ REMOVE	Section 3.7, Table 3.7-1
☐ ADD	☐ REPLACE	☐ REMOVE	
☐ ADD	☐ REPLACE	☐ REMOVE	
☐ ADD	☐ REPLACE	☐ REMOVE	
☐ ADD	☐ REPLACE	☐ REMOVE	

Any other specific or special instructions required for insertion of this proposal into the Mining and Reclamation Plan?

* Pagination adjustments will be made in Section 4.7 once the amendment has been approved.

July 23, 2001